

Name: \_\_\_\_\_

**p1106: Solve by factoring (v11)**

1. Solve the equation

$$x^2 + 9x + 8 = 0$$

$$(x + 8)(x + 1) = 0$$

$$x = -1$$

$$x = -8$$

2. Solve the equation

$$x^2 - 11x + 30 = 0$$

$$(x - 6)(x - 5) = 0$$

$$x = 5$$

$$x = 6$$

3. Solve the equation

$$4x^2 - 4x - 9 = 3x^2 + 2x - 2$$

$$x^2 - 6x - 7 = 0$$

$$(x + 1)(x - 7) = 0$$

$$x = 7$$

$$x = -1$$

4. Solve the equation

$$8x^2 + 12x + 62 = 7x^2 - 4x - 1$$

$$x^2 + 16x + 63 = 0$$

$$(x + 9)(x + 7) = 0$$

$$x = -7$$

$$x = -9$$

5. Solve the equation

$$6x^2 + 4x + 4 = 5x^2 - 2x - 1$$

$$x^2 + 6x + 5 = 0$$

$$(x + 5)(x + 1) = 0$$

$$x = -1$$

$$x = -5$$

6. Solve the equation

$$5x^2 + 17x - 12 = 0$$

$$(5x - 3)(x + 4) = 0$$

$$x = -4$$

$$x = \frac{3}{5}$$

7. Solve the equation

$$11x^2 - 85x + 56 = 0$$

$$(11x - 8)(x - 7) = 0$$

$$x = 7$$

$$x = \frac{8}{11}$$

8. Solve the equation

$$14x^2 - 5x - 11 = 7x^2 + 7x - 7$$

$$7x^2 - 12x - 4 = 0$$

$$(7x + 2)(x - 2) = 0$$

$$x = 2$$

$$x = \frac{-2}{7}$$

9. Solve the equation

$$19x^2 - 46x + 7 = 8x^2 + 2x - 9$$

$$11x^2 - 48x + 16 = 0$$

$$(11x - 4)(x - 4) = 0$$

$$x = 4$$

$$x = \frac{4}{11}$$

10. Solve the equation

$$9x^2 + 50x + 63 = 4x^2 - 3x - 9$$

$$5x^2 + 53x + 72 = 0$$

$$(5x + 8)(x + 9) = 0$$

$$x = -9$$

$$x = \frac{-8}{5}$$